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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,673	05/23/2005	Bianca Brogmann	Y2428-00163	1883

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EXAMINER	
HELM, CARALYNNE E	
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1615	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/510,673	BROGMANN ET AL.	
	Examiner	Art Unit	
	CARALYNNE HELM	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-54* is/are pending in the application.

4a) Of the above claim(s) *27-40 and 50-54* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26 and 41-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/2/06, 7/11/06, 12/6/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I and the species containing an opioid analgesic salt and an opioid antagonist salt are present where alkaline or water-swellable substances as well as acrylic acid and/or hydroxyalkylcelluloses are absent, in the reply filed on March 31, 2008 is acknowledged. Applicant's arguments about the species defined by the absence of alkaline or water-swellable substances as well as acrylic acid and/or hydroxyalkylcelluloses have been found persuasive in part; therefore, upon further consideration, the portion of the species election addressing these species is hereby withdrawn.

The requirement is still deemed proper and is therefore made FINAL.

Claims 27-40 and 50-54 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12 and 41 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification discloses chemicals, such as hydrochloride, sulfate, bisulfate, tatrate, nitrate, citrate, bitratrate, phosphate, malate, maleate, hydrobromide, hydroiodide, fumarate, and succinate salts of the opioid analgesic and antagonist in reference to claim 12 and cyanoethylmethacrylate, aminoalkylmethacrylate copolymers, poly(acrylic acid), poly(methacrylic acid), polymethacrylates, poly(methylmethacrylate) copolymers, and polyacrylamine in reference to claim 41 which meet the written description and enablement provisions of 35 USC 112, first paragraph. However, claims 12 and 41 are directed to encompass derivatives, which only correspond in some undefined way to specifically instantly disclosed chemicals. None of these derivatives meet the written description provision of 35 USC § 112, first paragraph, due to lacking chemical structural information for what they are and chemical structures are highly variant and encompass a myriad of possibilities. The specification provides insufficient written description to support the genus encompassed by the claim.

Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, makes clear that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention.* The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed.*" (See page 1117.) The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (See Vas-Cath at page 1116.)

With the exception of the above specifically disclosed chemical structures, the skilled artisan cannot envision the detailed chemical structure of the encompassed derivatives, analogs, etc., regardless of the complexity or simplicity of the method of isolation. Adequate

written description requires more than a mere statement that it is part of the invention and reference to a potential method for isolating it. The chemical structure itself is required. See Fiers v. Revel, 25 USPQ2d 1601, 1606 (CAFC 1993) and Amgen Inc. V. Chugai Pharmacentical Co. Ltd., 18 USPQ2d 1016. In Fiddes v. Baird, 30 USPQ2d 1481, 1483, claims directed to mammalian FGF's were found unpatentable due to lack of written description for the broad class. The specification provided only the bovine sequence. Finally, University of California v. Eli Lilly and Co., 43 USPQ2d 1398, 1404, 1405 held that:

> ...To fulfill the written description requirement, a patent specification must describe an invention and do so in sufficient detail that one skilled in the art can clearly conclude that "the inventor invented the claimed invention." *Lockwood v. American Airlines, Inc.* , 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (1997); *In re Gosteli* , 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) (" [T]he description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed."). Thus, an applicant complies with the written description requirement "by describing the invention, with all its claimed limitations, not that which makes it obvious," and by using "such descriptive means as words, structures, figures, diagrams, formulas, etc., that set forth the claimed invention." *Lockwood* , 107 F.3d at 1572, 41 USPQ2d at 1966.

Therefore, only the above chemically structurally defined chemicals, but not the full breadth of the claim meets the written description provision of 35 USC § 112, first paragraph. The species specifically disclosed are not representative of the genus because the genus is highly variant. Applicant is reminded that Vas-Cath makes clear that the written description provision of 35 USC § 112 is severable from its enablement provision. (See page 1115.)

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant claims the absence of “relevant amounts” of alkaline and/or water swellable substance as well as derivatives of acrylic acid and/or hydroxyalkylcelluloses; however, what actual quantity constitutes a relevant amount is unclear. The disclosure teaches generally away from using these components, but it also teaches away from using polyvinylpyrrolidone (see specification page 17 lines 11-18) then explicitly claims the inclusion of povidone (see claim 6), which is another name for the same component. Therefore it is unclear what is meant by the composition not comprising "relevant amounts" of a particular component.

Claims 13-15, 25-26, 45-46, and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “from about X to about Y" in claims 13-15, 25-26, 45-46, and 48 is a relative phrase, which renders the claim indefinite. The phrase “from about X to about Y" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The phrase “from X to Y" typically indicates a definite upper and lower bound. However, the phrase “from X to Y" is controverted by the term “about” which implies that values above and below both X and Y are permitted. Further, the extent of variance permitted by “about” is unclear in the context. Therefore it is unclear whether “about X” simply includes a small deviation (e.g. 1-20%) or if it could also include a much larger variation (e.g. 0.1%-200%) as well. Thus the interpretation of the phrase “from about X to about Y" in this context is unclear as no definitive upper and lower bound can be defined.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim neglects to recite the particular requirements that constitute "admission guidelines". Since it is unclear as to what limitations are actually being recited, the claim does not clearly set forth the metes and bounds of the patent protection desired.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The four factual inquiries of Graham v. John Deere Co. have been fully considered and analyzed in the rejections that follow.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-26 and 41-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (EP 0699436 – see IDS) in view of Sackler et al. (U.S. Patent No. 7,332,182) and Oshlack et al. (U.S. Patent No. 6,306,438).

Miller et al. teach an oral controlled (sustained) release composition that releases the hydrochloride salt of the opioid analgesic tramadol (see abstract and page 2 lines 6-18; instant claims 1, 11, 12, 17, 20, and 24). Miller et al. also teaches an uncoated tablet with tramadol hydrochloride, ethylcellulose, lactose, cetostearyl alcohol (also known as cetylstearyl alcohol), magnesium stearate, and purified talc (see page 7 example 1; instant claims 1-8, 16-17, 20-22, 41, 42, and 44). Further, Miller et al. teach the inclusion of additional components in the tablet composition including diluents, lubricants, binders and glidants, particularly exemplifying dibutyl sebacate as one particular other ingredient (see page 4 lines 48-50; instant claim 9). Additionally, Miller et al. teach that the composition contains at least one long chain hydrocarbon (e.g. cetostearyl alcohol) and that these compounds can be fatty acids as well as fatty alcohols (see page 4 lines 32-33). In particular, Miller et al. teach these hydrocarbons to be C_{12}-C_{40}, which includes stearic acid (see page 4 lines 32-33; instant claim 43). In light of these teachings, it would have been obvious to one of ordinary skill in the art at the time invention was made to have included stearic acid in the taught composition. Furthermore, production of particular release kinetics based upon the proportions and arrangement of constituents would

be known to one of ordinary skill in the art. The Miller et al. reference specifically teaches the varying amounts of the matrix components (see page 4 lines 41-47), thus at the time of the claimed invention, it would have been well within the purview of one of ordinary skill in the art to optimize such parameters as a matter of routine experimentation. Miller et al. do not specifically teach the inclusion of an opioid antagonist in their taught composition nor do they address the stability of the composition over a two year period.

Sackler et al. teach the combination of an opioid analgesic and antagonist in an oral composition to provide pain relief and also prevent addiction a well as provide a deterrent to parenteral abuse of the product (see column 1 lines 12-19 and 42-45, column 2 lines 29-31 and 44-46 and column 4 lines 35-45; instant claims 1, 20, and 24). Sackler et al. go on to teach that the composition is designed such that the opioid analgesic and antagonist are released over a sustained period (see column 3 lines 51-57). Further, Sackler et al. teach a particular combination, namely the hydrochloride salt forms of naloxone and oxycodone (see table 2; instant claims 11-12 and 44). Here a unit dosage composition is presented with 40 mg oxycodone and 0.9 mg (interpreted to be “about 1 mg”) of naloxone, which corresponds to a ratio of 4:1, oxycodone to naloxone (see table 2; instant claims 13-15, 25-26, 45-46, and 48-49). A person of ordinary skill in the art has a good reason to pursue the known options within their technical grasp. Since both Miller et al. and Sackler et al teach a sustained release oral opioid composition, it would have been obvious to one of ordinary skill in the art at the time of the invention to employ the drug combination of Sackler et al. as the opioid component in the composition of Miller et al. In addition there would have been a reasonable expectation of success for this combination to one of ordinary skill in the art to at the time of the invention.

Oshlack et al. teach a composition similar to that of Miller et al. where ethylcellulose is combined with stearylalcohol along with other claimed excipients and a tramadol hydrochloride

salt (see table 1). Oshlack et al. do teach a means by which such a composition would be able to be stored at 25ºC with 60% humidity for two years (see column 17 lines 19-37 and column 18 lines 43-49; instant claim 10). Thus it was known at the time of the invention how to obtain the claimed stability characteristics for the product taught by Miller et al. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to product a product that could be stored for at least two years at the recited "standard conditions".

Instant claims 18-20, 23, and 47 are product by process claims whose processes provide no additional patentable structure to the claimed product. According to MPEP 2113 " '[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.' In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)". Therefore since the claimed components and those of Miller et al. in view of Sackler et al. and Oshlack et al are the same, the product taught by this modified Miller et al. reference meet the limitations of these product-by-process claims.

Finally, the limitations of the matrix being a diffusion matrix that is substantially non-erosive, substantially non-swellable, as well as releases the compounds in an invariant and independent manner are viewed as properties of the composition based upon its constituent materials. Thus since Miller et al. in view of Sackler et al. and Oshlack et al. teach the same composition as that claimed, this composition would function in the same manner and have the same properties. It is noted that In re Best (195 USPQ 430) and In re Fitzgerald (205 USPQ 594) discuss the support of rejections wherein the prior art discloses subject matter which there is reason to believe inherently includes functions that are newly cited or is identical to a product

instantly claimed. In such a situation the burden is shifted to the applicants to "prove that subject matter shown to be in the prior art does not possess characteristic relied on" (205 USPQ 594, second column, first full paragraph). Therefore claims 1-26 and 41-49 are obvious over Miller et al. in view of Sackler et al. and Oshlack et al.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-26 and 41-49 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-44 of copending Application No. 10/510674. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim a storage stable pharmaceutical that includes ethylcellulose, oxycodone and naloxone as salts in the same ratios and mass quantities, with the same fatty acids and additional excipients. Further both claim the absence of alkaline or water-swellable substances as well as acrylic acid and/or hydroxyalkylcelluloses. In

fact, the claims of application 10/510674 would anticipate those of the instant applicant were they the first to be patented.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARALYNNE HELM whose telephone number is (571)270-3506. The examiner can normally be reached on Monday through Thursday 8-5 (EDT).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Caralynne Helm/
Examiner, Art Unit 1615

/Michael P Woodward/
Supervisory Patent Examiner, Art Unit 1615